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GENE SCREENING METHOD USING NUCLEAR RECEPTOR

Abstract of the Disclosure

A system in which a ligand is formed by the expression of a polypeptide that converts a ligand precursor into a ligand, and the ligand thus formed binds to a nuclear receptor to thereby induce the expression of a reporter gene located downstream of the target sequence is constructed. Searching a gene library using this system can isolate a gene encoding a polypeptide capable of converting a ligand precursor into a ligand. This system, which takes the advantage of the transcriptional regulatory function of a nuclear receptor, enables screening a ligand that binds to a nuclear receptor and to examine whether or not a test compound is a ligand that binds to the nuclear receptor, and also screening genes that encode polypeptides capable of converting an inactive form of a wide range of transcriptional regulatory factors into an active form.

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